PUBLIC EMERGENCY NOTIFICATION AND INSTRUCTION

THE GOOD, THE BAD AND THE UGLY

Today | **All** | **Missed**

⚠ Emergency Alerts ⊗

Emergency Alert 1:02 AM
Tornado Warning in this area til 1:30 AM EDT. Take shelter now. Check local media. -NWS

⚠ EMERGENCY ALERTS ✕

Emergency Alert
BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.

Settings

LOS ANGELES — Belated warnings from public officials and the reluctance of residents who had survived previous fires to leave home were among the factors that contributed to the delayed and chaotic evacuation in what has become the deadliest wildfire in California history, survivors said.

TRADITIONAL – MODERN MEANS OF NOTIFICATION

- Press Releases

- Press Conferences

- Printed materials

- Door to door

- Sirens/bells

- Emergency Alert System

Social media (Facebook, Twitter, etc.)

Cell Phones

Text Messages

E-mail

Elec. Billboard

IPAWS

Reverse Landline

System

IPAWS

Integrated Public Warning Alert System

IPAWS AUTHORITY

- **Executive Order 13407 – Public Alert and Warning System**

  - "It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people in situations of war, terrorist attack, natural disaster, or other hazards to public safety and well-being (public alert and warning system), taking appropriate account of the functions, capabilities, and needs of the private sector and of all levels of government in our Federal system, and to ensure that under all conditions the President can communicate with the American people."

- **1995 Presidential Memorandum "*Emergency Alert System (EAS) Statement of Requirements*"**

  - The national level EAS must be: Fully integrated from the national to local level, yet capable of independent local (Priority Two) and state (Priority Three) operations.
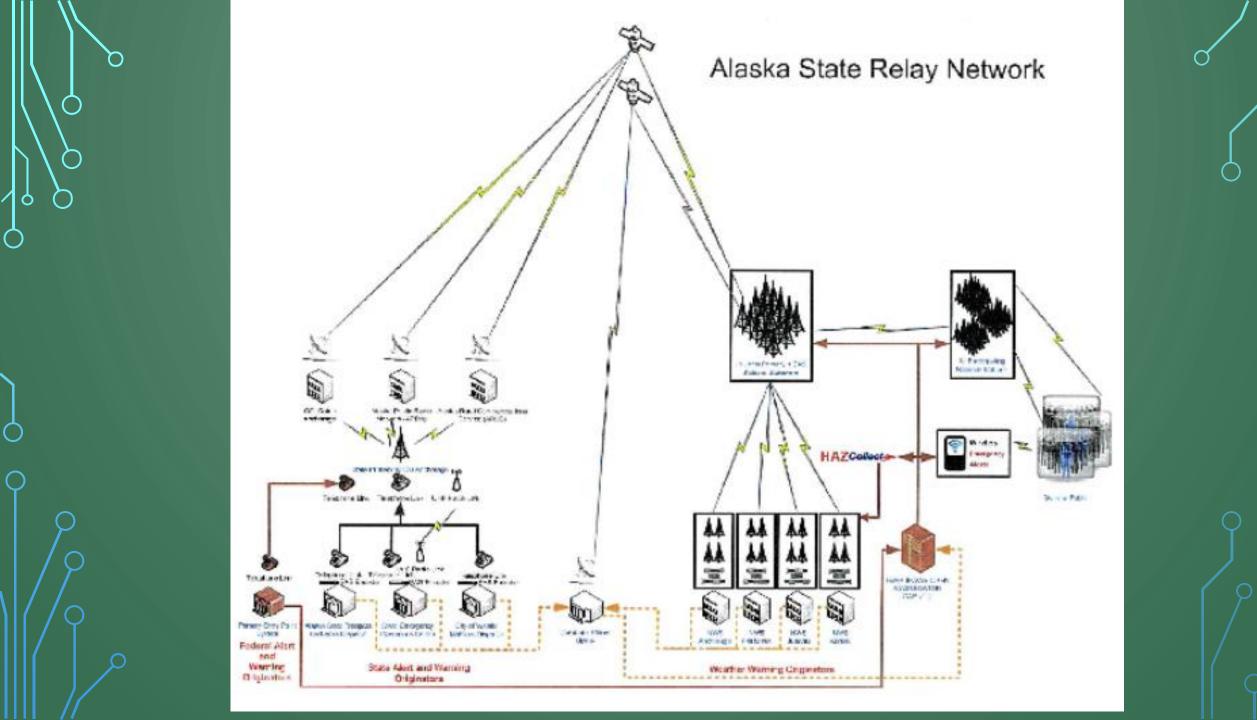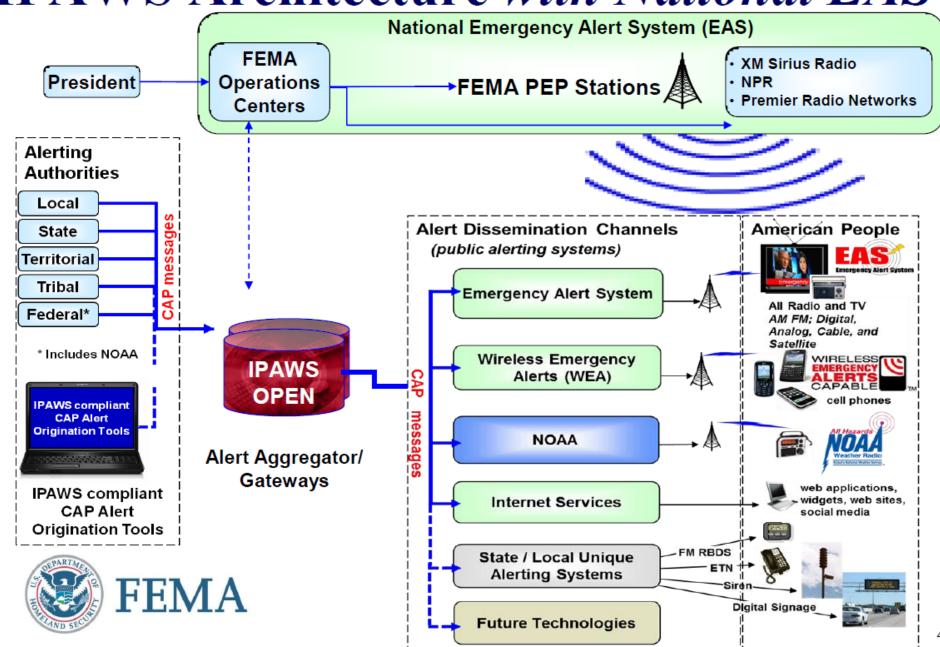
EVOLUTION OF PUBLIC EMERGENCY ALERTING

Alaska State Relay Network

IPAWS Architecture *with National EAS*

4

Wireless Emergency Alerts

WIRELESS EMERGENCY ALERTS CAPABLE ™

▸ *IPAWS is the only way emergency managers can send Wireless Emergency Alerts (WEA)*

▸ Enables authorized public safety officials to send **90 character, geographically targeted, emergency alerts** to cellular phones in a danger zone

▸ Uses **"cell broadcast"** technology to avoid network congestion

▪ Cellular carrier participation voluntary

  ▪ Most Commercial Mobile Service Providers (CMSP) have opted into WEA

▪ Citizens may opt-out of receiving alerts

  ▪ New phones are delivered opted-in

FEMA

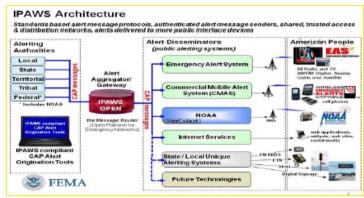▸ WEA capabilities are free to alerters and alertees – no usage or text message charges

▪ Significantly different from SMS/email based alerting systems

  ▪ **Not subscription based** -- true location based alerting

  ▪ Sends alerts to phones in an area - not to a database of phone numbers

  ▪ **For "Alerts" only**…. not for notification type messages

  ▪ Only for emergencies categorized as:

    ▪ **Imminent Threat (Severity, Urgency, Certainty)**

    ▪ **AMBER / Child Abduction Emergency**

    ▪ **Presidential (*** Cannot Opt-Out ***)**

Emergency Alert System and IPAWS

- All EAS participants are required to monitor IPAWS for a national EAS emergency alert message

- FCC deadline for EAS participants to begin receiving Common Alerting Protocol (CAP) formatted alerts from IPAWS was June 30, 2012

  - Most participants have already installed updated equipment and are monitoring the IPAWS EAS Feed

  - Four test messages (RWTs) per week are posted on the IPAWS EAS Feed

- State and local authorities use IPAWS to route alerts to local EAS stations

- IPAWS complements - *but does not replace* - the systems State and local authorities are currently using for EAS

EAS participants are defined by the FCC's EAS rules in C.F.R. 47 Part 11 and include all radio and television broadcast, cable, satellite, and wireline providers (e.g. Verizon FiOS or AT&T Uverse)

FEMA

HOW TO START

- Develop or meet with the Local Emergency Alert System (EAS) Committee (Broadcasters, NOAA and other stakeholders)

STATE AND LOCAL OPTIONS
WEATHER RELATED OPTIONS RESTRICTED TO NWS

- Administrative Message
- Avalanche Warning
- Civil Danger Warning
- Civil Emergency Message CEM.
- Earthquake Warning
- Evacuation Immediate EVI.
- Fire Warning   FRW.
- Hazardous Materials Warning   HMW.
- Law Enforcement Warning LEW
- Local Area Emergency LAE.

- 911 Telephone Outage Emergency
- Nuclear Power Plant Warning
- Practice/Demo Warning
- Radiological Hazard Warning
- Required Weekly Test RWT
- Shelter in Place Warning SPW
- Special Marine Warning
- Tornado Warning
- Volcano Warning

LOCAL EAS PLAN

- Draft a Local Emergency Alert System Plan
- Include Broadcasters, Cable Operators & Cellular Service Providers
- Plan Template is available from DHS & EM
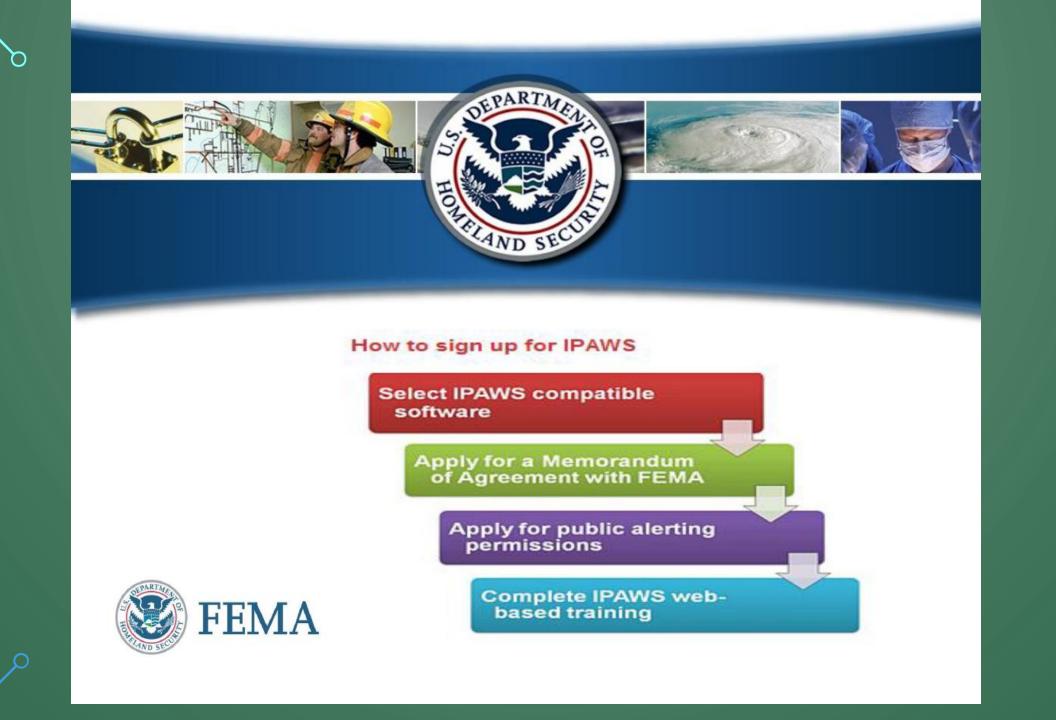- Plan needs to be approved by DHS & EM and NWS.

APPLICATION

- Select a software vendor from the approved list (https://www.fema.gov/media-library-data/1513184978922-e4ac90300d4255f54d213b469cc64c24/Alert_Origination_Software_Providers_12072017.pdf)

- Complete IPAWS application and MOU with assistance from the vendor

- Upon Approval, IPAWS will issue you a COG ID

TRAINING

- **TRAINING**

1. **IS 247 A   Integrated Public Alert and Warning System (IPAWS)** Approximately 2 hours. http://training.fema.gov/is/courseoverview.aspx?code=IS-247.a. Copy of certificate to be delivered to IPAWS, with completed Appendix C.

2. **IPAWS** Joint Interoperability Test Command (JITC). Separate segment. BE CAREFUL THAT ALL EXERCISE IS IN THIS PORTAL. CALL TO SCHEDULE.
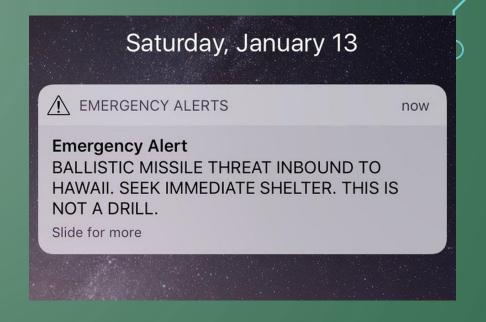
DEMONSTRATIONS

- CAP Alert Demo

- Instant Messaging System

MASS NOTIFICATION FOR THE NON-TECHNICAL EMERGENCY MANAGER

WHAT IS MASS NOTIFICATION?

- One of the Most Highly Visible Functions that Emergency Managers deal with

- Sometimes, one of the most criticized!

Saturday, January 13

⚠ EMERGENCY ALERTS   now

Emergency Alert
BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.

Slide for more

News > **California News** · News

Camp Fire: Paradise residents say they received no mass cellphone alerts to evacuate, or to warn of fires

Residents learned late of the danger — then faced gridlocked traffic

THE PUBLIC'S EXPECTATION

- Immediate Information to Cell Phones and other "personal" systems

- All of the information, right now

- Accuracy is (sometimes) a secondary concern

- Visuals that are in line with regular social media experience

Borough adopts new emergency alert system

By AARON BOLTON · MAY 2, 2018

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CREDIT COURTESY OF THE KENAI PENINSULA BOROUGH

After a large earthquake sounded tsunami alarms around the Gulf of Alaska in January, communities put their emergency plans and equipment to the test, and some communities found shortcomings.

The Kenai Peninsula Borough's Department of Emergency Management had issues with its emergency notification system, Rapid Notify, which calls landlines and subscribed cell phones with automated messages.

Dan Nelson is the head of the department. He said some Kenai Peninsula residents never received a call, or received it hours after the tsunami warning was no longer in effect.

MEETING THE PUBLIC'S EXPECTATIONS

- Changing technology is making it hard to keep up

- The traditional way of verifying and providing accurate information creates a delay that is no longer acceptable in the digital world

- Mobility technologies are not built for public safety functions

- Landline usage decreasing – 52.5% of homes have only wireless in 2017

- More people are using internet based technologies – Netflix, Radio, etc. that traditional warning systems like the EAS do not reach

ALERT & WARNING SYSTEMS - FORMAL

- Emergency Alert System

- Wireless Emergency Alerts

- Commercial Products

ALERT & WARNING SYSTEMS - INFORMAL

- Social media

- Traplines

- Local radio/television broadcasting

- Existing community groups and key messengers

Kenai Peninsula Fire & Emergency Information
Page · 9.5K like this · Community

Created to assist and inform people of the Kenai Peninsula when an emergency arises, such as wildfire, earthquake, etc.

✓ Liked ▼

ALASKA AND THE GEOGRAPHY PROBLEM (OR THE FIPS PROBLEM)

- FIPS is the Federal Information Processing Standard.

- These codes are assigned by county and are used for a number of things, including EAS/WEA and other warning system.

- Using some of the available tools constrains us to the use of this standard

ALASKA
BOROUGHS/CENSUS AREAS and FIPS CODES

North Slope
02185

02188
Northwest
Arctic

02180
Nome

Yukon-Koyukuk
02290

Fairbanks North Star

Kusilvak
02158

02090

Denali
02068

Southeast
Fairbanks
02240

Bethel
02050

Matanuska-Susitna
02170

Dillingham
02070

02016
Aleutians West

Valdez-Cordova
02261

02122

02282
Yakutat

02230
Skagway

02060
Bristol Bay

02164
Lake and Peninsula

Kenai Peninsula

02020
Anchorage

02100
Haines

02105
Hoonah-Angoon

02110
Juneau

02195
Petersburg

02150
Kodiak Island

02220
Sitka

02275
Wrangell City
and Borough

02013
Aleutians East

02198
Prince of Wales-
Hyder

02130
Ketchikan Gateway

NATIONAL WEATHER SERVICE
ALASKA REGION

APRIL 2019
IDP GIS

PICKING THE RIGHT TOOLS FOR YOUR TOOLBOX

- EAS and WEA: No Opt-in Required, designed to be broadcast. Very large broadcast area, not suitable for localized emergencies, hard to customize messaging

- Commercial Systems: The sky is (mostly) the limit on customization and personalization. There is a cost involved, depending on features but it is Opt-In.

- Combination of both?

PLANNING YOUR NOTIFICATION SYSTEM

- What kind of messages do you intent to distribute?
    - Emergency Only – Wildfire, Tsunami, Evacuate, etc.
    - Informational – Run your water, city street maintenance this week
    - Internal – Activate and inform your organizations team

PLANNING YOUR NOTIFICATION SYSTEM

- What are the communication modes prevalent in your jurisdiction, and what is the size (audience and geography)?
  - Landline phones
  - Mobile Phones
  - VHF radio
  - Community Center

OTHER CONSIDERATIONS

- Budget

- Maintenance and upkeep

- IT knowledge and needs

- On-site equipment required

MARKETING YOUR SYSTEM

- Do you have a marketing strategy to encourage sign-ups/opt-ins? Cost in time or budget?

- Consider integrating with your LEPC and other community groups.

- Easiest opt-in process possible. The majority will NOT take steps to opt in until after an incident. KPB Opt-In currently at about 4,000 one year later out of a population of 65,000 or about 16%

TIPS FOR SUCCESS

- Fully investigate any systems you intent to purchase. Have your IT staff and other stakeholders present.

- Don't over promise and under deliver – understand the restrictions the systems have, what authorities you have, and your ability to activate

- Don't trust the sales pitch – features change and support gets discontinued

- Investigate your support options and training